

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled)
2. (currently amended): Process according to claim 4 9, wherein the membrane discs have a rectangular cross section.
3. (canceled)
4. (currently amended): Process according to claim 4 8, wherein each of the membrane discs have different rotational speeds.
5. (currently amended): Process according to claim 4 8, further comprising the step of discharging the permeate at a vacuum.
6. (original): Process according to claim 5, wherein the vacuum is up to 0.5 bar.
7. (canceled)
8. (currently amended): Process for cross-flow filtration of a fluid to produce a flow of concentrate and a flow of filtrate using a filtration device having a plurality of rotating membrane discs mounted on at least first and second hollow shafts, each of the membrane discs having a hollow disc body in fluid communication with the associated hollow shaft, a triangular cross section, and first and second membrane surfaces, the membrane discs mounted on a one of the hollow shafts overlapping the membrane discs mounted on another of the hollow shafts in an overlap area, the process comprising the steps of:
 - rotating the hollow shafts and the membrane discs mounted thereon at a rotational speed;
 - introducing the fluid into at least the overlap area of the filtration device;
 - creating overflow speeds at the membrane surfaces in the range of 1 to 5 m/sec;
 - creating a turbulence between the membrane surfaces of at least two membrane discs in the overlap area;
 - diffusing a portion of the fluid through the membrane surfaces of the membrane discs into the hollow disc body to create a permeate within the hollow disc body and a concentrate exteriorly of the membrane surfaces;
 - collecting the permeate within the hollow shaft from the hollow disc bodies of the membrane discs mounted thereon;
 - discharging the permeate from the hollow shaft as the flow of filtrate; and
 - discharging the flow concentrate from the overlap area at an overpressure.
9. (currently amended): Process for cross-flow filtration of a fluid to produce a flow of concentrate and a flow of filtrate using a filtration device having a plurality of rotating membrane discs mounted on at least first and second hollow shafts, each of the

membrane discs having a hollow disc body in fluid communication with the associated hollow shaft and first and second membrane surfaces, the membrane discs mounted on a one of the hollow shafts overlapping the membrane discs mounted on another of the hollow shafts in an overlap area, the process comprising the steps of:

- rotating the hollow shafts and the membrane discs mounted thereon at a rotational speed;

- introducing the fluid into at least the overlap area of the filtration device;

- creating overflow speeds at the membrane surfaces in the range of 1 to 5 m/sec;

- creating a turbulence between the membrane surfaces of at least two membrane discs in the overlap area;

- diffusing a portion of the fluid through the membrane surfaces of the membrane discs into the hollow disc body to create a permeate within the hollow disc body and a concentrate exteriorly of the membrane surfaces;

- collecting the permeate within the hollow shaft from the hollow disc bodies of the membrane discs mounted thereon;

- discharging the permeate from the hollow shaft as the flow of filtrate; and

- discharging the flow concentrate from the overlap area at an overpressure of 10 to 14 bar.

10. (new): Process according to claim 9, wherein each of the membrane discs have different rotational speeds.

11. (new): Process according to claim 9, further comprising the step of discharging the permeate at a vacuum.

12. (new): Process according to claim 11, wherein the vacuum is up to 0.5 bar.